



AFCTN Report 94-114

AFCTB-ID
94-113



Technical IGES Transfer

Using:

Texas Instruments' Data



MIL-STD-1840A



MIL-D-28000A (IGES)



Quick Short Test Report

16 August 1994

19960408 027



Prepared for
Electronic Systems Center
Air Force CALS Program Office
HQ ESC/AV-2
4027 Colonel Glenn Hwy Suite 300
Dayton OH 45431-1672

DATA OWNERSHIP INFORMATION

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

DISCLAIMER NOTICE



**THIS DOCUMENT IS BEST
QUALITY AVAILABLE. THE
COPY FURNISHED TO DTIC
CONTAINED A SIGNIFICANT
NUMBER OF PAGES WHICH DO
NOT REPRODUCE LEGIBLY.**

AFCTN Test Report
94-114

AFCTB-ID
94-113

**Technical IGES Transfer
Using:
Texas Instruments' Data:**

**MIL-STD-1840A
MIL-D-28000A (IGES)**

Quick Short Test Report

16 August 1994

Prepared By
Air Force CALS Test Bed
Wright-Patterson AFB, OH 45433

AFCTB Contact
Gary Lammers
(513) 427-2295

AFCTN Contact
Mel Lammers
(513) 427-2295

DISCLAIMER

This document was prepared as an account of the work sponsored by the Air Force. Neither the United States Government, the Air Force, nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, nor represents that its use would not infringe on privately owned rights. Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the Air Force. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the Air Force, and shall not be used for advertising or product endorsement purposes.

Available to the public from the
National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161

This report and those involved in its preparation do not endorse any product, process, or company stated herein. Use of these means by anyone does not imply certification by the Air Force CALS Test Network (AFCTN).

Air Force CALS Test Bed

Notification of Test Results

16 August 1994

This notice documents the results of an Air Force CALS Test Bed (AFCTB) Quick Short Test Report (QSTR) evaluation of data submitted by:

Texas Instruments

Identified as follows:

Title:	Technical IGES Transfer
Program:	N/A
Program Office:	N/A
Contract No.:	N/A
QSTR No.:	AFCTB-ID 94-113

Received on the following media: **Electronic Transfer**

The results of the QSTR evaluation are as follows:

MIL-STD-1840A Standard	Fail
MIL-STD-1840A Media Format:	Pass
MIL-D-28000A IGES:	Fail
MIL-M-28001B SGML:	N/A
MIL-R-28002A Raster:	N/A
MIL-D-28003 CGM:	N/A

Formal results with associated disclaimer are documented and available from the AFCTB.

**Air Force CALS Test Bed
HQ ESC/AV-2P
4027 Colonel Glenn Highway, Suite 300
Dayton, OH 45431-1672
Phone: 513-257-3085 FAX: 513-257-5881**

Contents

1.	Introduction.....	1
1.1.	Background.....	1
1.2.	Purpose.....	2
2.	Test Parameters.....	3
3.	1840A Analysis.....	5
3.1.	External Packaging.....	5
3.2.	Transmission Envelope.....	5
3.2.1.	Tape Formats.....	5
3.2.2.	Declaration and Header Fields.....	5
4.	IGES Analysis.....	6
5.	SGML Analysis.....	8
6.	Raster Analysis.....	8
7.	CGM Analysis.....	8
8.	Conclusions and Recommendations.....	9
9.	Appendix A - Tapetool Report Logs.....	10
9.1.	Tape Catalog.....	10
9.2.	Tape File Set Validation Log.....	11
10.	Appendix B - Detailed IGES Analysis.....	14
10.1.	File D001Q001.....	14
10.1.1.	Parser/Verifier Log.....	14
10.1.2.	Parser Log - IGESWorks.....	20
10.1.3.	Error Log Preview.....	23

10.1.4. Output CADLeaf.....	24
10.1.5. Output CALSView.....	25
10.2. File D001Q002.....	26
10.2.1. Parser/Verifier Log.....	26
10.2.2. Parser Log - IGESWorks.....	32
10.2.3. Error Log Preview.....	35
10.2.4. Output CALSView for Windows.....	37
10.3. File D001Q003.....	38
10.3.1. Parser/Verifier Log.....	38
10.3.2. Parser Log - IGESWorks.....	45
10.3.3. Error Log Preview.....	47
10.3.4. Output Cadkey v6.0.....	48
10.3.5. Output Cadkey v6.0 Detail.....	49
10.3.6. Output CALSView for Windows.....	50
10.4. File D001Q004.....	51
10.4.1. Parser/Verifier Log.....	51
10.4.2. Parser Log - IGESWorks.....	58
10.4.3. Error Log Preview.....	60
10.4.4. Output CALSView for Windows.....	62
10.4.5. Output IGESWorks/Arrowheads.....	63
10.4.6. Output IGESWorks/Missing Arrowheads....	64
10.4.7. Output Preview.....	65

1. Introduction

1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze Texas Instruments' interpretation and use of the CALS standards in transferring technical engineering data. Texas Instruments used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff via an electronic transfer.

2. Test Parameters

Test Plan: AFCTB 94-113

Date of Evaluation: 16 August 1994

Evaluator:
George Elwood
Air Force CALS Test Bed
DET 2 HQ ESC/AV-2P
4027 Colonel Glenn Hwy
Suite 300
Dayton OH 45431-1672

Data Originator:
Mike Hurn
Texas Instruments
MS 8420
PO Box 869305
Plano TX 75086
(214) 575-3368

Data Description:
Technical Engineering Drawing Test
1 Document Declaration file
4 Initial Graphics Exchange Specification
(IGES) files

Data Source System:
1840
HARDWARE
VAX VMS System
Sun Spark II Workstation
SOFTWARE
Texas Instruments (TI) Tapetool

IGES
HARDWARE
SUN Sparc
SOFTWARE
Autodesk AutoCAD R12_c3
ITI IGESWorks v2.0.0

Evaluation Tools Used:

MIL-STD-1840A (TAPE)
PC 486/50

AFCTN Tapetool v1.2.10 DOS

MIL-D-28000 (IGES)
HP 735

Carberry CADLeaf 4.0
SGI Indigo2
Cadkey ig2c
Cadkey Cadkey v6.0
IGES Data Analysis (IDA) CALSView
International TechneGroup Incorporated
(ITI) IGES/Works v2.0

Sun SparcStation 2

IDA Parser/Verifier v94
IDA IGESView v3.05
Rosetta Technologies Prepare
Rosetta Technologies Preview v3.2

PC 486/50

AUTODESK AutoCAD 386 R12
Carberry CADLeaf Windows
IDA CALSView Windows
IDA IGESView Windows

Standards

Tested:

MIL-STD-1840A
MIL-D-28000A

3. 1840A Analysis

3.1 External Packaging

The files arrived at the Air Force CALS Test Bed (AFCTB) via an electronic transfer to the internet server. No physical media was exchanged or evaluated.

3.2 Transmission Envelope

The transfer set received by the AFCTB contained MIL-STD-1840A files. The files were named per the standard conventions.

3.2.1 Tape Formats

No tape was submitted for evaluation.

3.2.2 Declaration and Header Fields

No errors were found in the Document Declaration file or data file headers. This portion of the transfer set meets the requirements defined in CALS MIL-STD-1840A.

4. IGES Analysis

The AFCTB has several tools for viewing IGES files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

The transfer set contained four IGES files. There are two sets of files in this test:

- 1) D001Q001 and D001Q003 come from AUTODESK's AIT directly.
- 2) D001Q002 is the result of running D001Q001 through ITI's IGES/Works v2.0.0 Subset Generator.
D001Q004 is the result of running D001Q003 through ITI's IGES/Works v2.0.0 Subset Generator.

These files were evaluated using IDA's parser/verifier set for CALS Class II. Files D001Q001 and D001Q003 had a reported error in the IGES version used. MIL-D-28000A, amendment one permits IGES specification four and the ANSI version. The permitted values of global field 23 are six or seven.

Specification version = 9 (IGES 5.1)
ERROR 4048: Illegal specification version for CALS Class II specified.

The start section of the files was checked for the required CALS MIL-D-28000A conformance statement. Files D001Q002 and D001Q004 had the required statement. The other two files did not have the statement.

The files were read using AUTODESK's AutoCAD R12 with translator version 5.1. No problems were reported. The displayed and printed images were compared to the provided postscript output files without a noted error.

According to Edward Clapp of AUTODESK, "ITI puts the disclaimer in the Start Section. This is proper and appropriate, but it is not shown in the appendices nor is it noted in the body of the report.

This subset generator is responsible for placing Subfigure Instances into the IGES file prior to their corresponding Subfigure Definitions, as noted by IDA's Parser/Verifier.

There are two problems associated with D001Q001 and D001Q003. First, they were created with the (default) setting to create IGES 5.1 files; second, the Start Section does not include the statements required for conformance to the MIL-D-28000A Class II subset. In both cases, AIT provides options, which were not chosen, to enable these requirements."

The files were converted using Cadkey's *ig2c* utility. The resulting files were read into Cadkey's *Cadkey*, displayed, and printed. No errors were noted during this process. When printed the arrowheads appear to be missing, but when a detailed area was printed the arrowheads were displayed.

The files were read into Carberry's *CADLeaf* software without a reported error. A discrepancy was noted in the text font. The plus and minus symbols were displayed as a single quote mark. It was also noted that the arrowheads in files D001Q001 and Q002 did not point to the exact location as shown in the included postscript files, or the other application outputs.

When an attempt was made to read the files into Carberry's *CADLeaf for Windows*, an error message indicating bad files was displayed. These are the same files used by all applications.

The files were read using IDA's *CALSView for Windows*. No problems were noted in the displayed or printed images.

The files were read using IDA's *IGESView* and *IGESView for Windows*. No problems were noted during this process.

The files were read using ITI's *IGESWorks* without a reported error. The files were displayed and printed. It was noted in files Q003 and Q004 that all of the arrowheads were moved to the lower left corner of the image. No arrowheads were noted in the correct locations on the drawing.

The IGES files were converted using Rosetta Technologies' *Prepare* with reported errors. All files had reported unsupported entities. The resulting files were read into Rosetta Technologies' *Preview*, displayed and printed. Files Q003 and Q004 had noted errors in the font. The plus/minus symbols were displayed as a single quote mark.

The IGES files failed to meet the CALS MIL-D-28000A, Amendment One specification. The errors were the use of an invalid version of IGES, and missing start section conformance statements.

5. SGML Analysis

No Standard Generalized Markup Language (SGML) files were included in this evaluation.

6. Raster Analysis

No Raster files were included in this evaluation.

7. CGM Analysis

No Computer Graphics Metafiles (CGMs) were included in this evaluation.

8. Conclusions and Recommendations

No errors were noted in the CALS Document Declaration files or data file headers. This portion of the electronic data set meets the requirements defined in CALS MIL-STD-1840A.

The IGES files Q001 and Q003 did not meet the requirements of CALS MIL-D-28000A for Class II files, because the required conformance statement was missing in the start section of each file, and an illegal version of IGES was specified in each file. IGES files Q002 and Q004 did have the required conformance statement and did specify a legal version of IGES; however, IGES files Q002 and Q004 did not meet the requirements of CALS MIL-D-28000A for Class II files, because of other errors reported in Appendix B, Section 10 of this report.

The electronic data set, submitted by Texas Instruments, does not meet the CALS MIL-D-28000A requirements, due to the reported errors in the IGES files.

9. Appendix A - Tapetool Report Logs

9.1 Tape Catalog

CALS Test Network Catalog Evaluation - Version 1.2; Release 10 (O)

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information
ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes
for Information Interchange
ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Tue Aug 16 11:00:51 1994

MIL-STD-1840A File Catalog

File Set Directory: C:\TT\SET011

Page: 1

File Name	File Type	Record Format/ Length	Block Length/ Length/Total	Selected/ Extracted
D001	Document Declaration	D/00256	02048/000000	Extracted
D001Q001	IGES	F/00080	02000/000000	Extracted
D001Q002	IGES	F/00080	02000/000000	Extracted
D001Q003	IGES	F/00080	02000/000000	Extracted
D001Q004	IGES	F/00080	02000/000000	Extracted

Catalog Process terminated normally.

9.2 Tape File Set Validation Log

CALS Test Network File Set Evaluation - Version 1.2; Release 10 (O)

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

Tue Aug 16 11:00:51 1994

MIL-STD-1840A File Set Evaluation Log

File Set: SET011

Found file: D001

Extracting Document Declaration Header Records...

Evaluating Document Declaration Header Records...

srcsys: Texas Instruments P.O.Box 869305 Plano, TX 75086 Mail Station 8420
srcdocid: CALS TEST NETWORK MIL-D-28000 CLASS II TEST (AUTOCAD AND IGESWORKS)
srcrelid: NONE
chglvl: ORIGINAL
dteisu: 19940812
dstsys: AIR FORCE CALS TEST BED 4027 COLONEL GLENN HIGHWAY SUITE 300 DAYTON,
OHIO 45431-1672
dstdocid: TEXAS INSTRUMENTS MIL-D-28000 CLASS II TEST (AUTOCAD AND IGESWORKS)
dstrelid: NONE
dtetrn: 19940812
dlvacc: NONE
filcnt: Q4
ttlcls: UNCLASSIFIED
doccls: UNCLASSIFIED
doctyp: Product Data
docttl: NONE

Found file: D001Q001

Extracting IGES Header Records...

Evaluating IGES Header Records...

srcdocid: NONE
dstdocid: NONE
txtfilid: NONE
figid: NONE
srcgph: NONE
doccls: UNCLASSIFIED
notes: NONE

```
Saving IGES Header File: D001Q001.HDR
Saving IGES Data File: D001Q001.IGS
Found file: D001Q002
Extracting IGES Header Records...
Evaluating IGES Header Records...
```

```
srcdocid: NONE
dstdocid: NONE
txtfilid: NONE
figid: NONE
srcgph: NONE
doccls: UNCLASSIFIED
notes: NONE
```

```
Saving IGES Header File: D001Q002.HDR
Saving IGES Data File: D001Q002.IGS
```

```
Found file: D001Q003
Extracting IGES Header Records...
Evaluating IGES Header Records...
```

```
srcdocid: NONE
dstdocid: NONE
txtfilid: NONE
figid: NONE
srcgph: NONE
doccls: UNCLASSIFIED
notes: NONE
```

```
Saving IGES Header File: D001Q003.HDR
Saving IGES Data File: D001Q003.IGS
```

```
Found file: D001Q004
Extracting IGES Header Records...
Evaluating IGES Header Records...
```

```
srcdocid: NONE
dstdocid: NONE
txtfilid: NONE
figid: NONE
srcgph: NONE
doccls: UNCLASSIFIED
notes: NONE
```

```
Saving IGES Header File: D001Q004.HDR
Saving IGES Data File: D001Q004.IGS
```

Evaluating numbering scheme...

No errors were encountered during numbering scheme evaluation.

Numbering scheme evaluation complete.

Checking file count...

No errors were encountered during file count verification.

File Count verification complete.

No errors were encountered in Document D001.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

10. Appendix B - Detailed IGES Analysis

10.1 File D001Q001

10.1.1 Parser/Verifier Log

```
*****
*****  IGES PARSER/VERIFIER  *****
*****      MARCH 1994      *****
*****  IGES Data Analysis  *****
*****      (708) 344-1815    *****
*****
```

```
Input file is d001q001.igs
Checking conformance to CALS Class II (MIL-D-28000A 2/10/92)
```

```
Today is August 16, 1994 11:23 AM
```

```
*****
*****  CHECK FILE SYNTAX  *****
*****
```

Section	Records
Start	11
Global	5
Directory	2092 (1046 Entities)
Parameter	2152
Terminate	1

```
No syntax errors detected.
```

```
*****
*****  SUMMARY AND STATISTICS  *****
*****
```

```
*** File and Product Name Information ***
```

```
File name from sender = '/usr3/cadds/parts/scr/4216074-c/1.igs'
File creation Date.Time = '940725.113515'
Model change Date.Time = '940725.113436'
Author = 'mda drafting'
Department = 'ti-lewisville'
Product name from sender = '/usr3/cadds/parts/scr/4216074-c/1'
Destination product name = '/usr3/cadds/parts/scr/4216074-c/1'
```

*** Parameter Delimiters ***

Delimiter = ','
Terminator = ';'

*** Originating System Data ***

System ID = 'AutoCAD-12_c3 (Sun4/SPARCstation)'
Preprocessor version = 'IGESOUT (v5.1.01 Feb 22 1993)'
Specification version = 9 (IGES 5.1)
ERROR 4048: Illegal specification version for CALS Class II specified.

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 99 Mantissa = 15

*** Global Model Data ***

Model scale = 1.0000E+00
Unit flag = 1
Units = 'IN'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 3.300000E-08
Maximum coordinate = 3.300000E+01

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1046
	Blanked	0
Independence:	Independent	480
	Physically Subordinate	565
	Logically Subordinate	1
	Totally Subordinate	0
Entity use:	Geometry	563
	Annotation	481
	Definition	2
	Other	0
	Logical/Positional	0
	2D parametric	0
	Construction geometry	0
	Not Specified	0

Hierarchy:	Structure DE applies	1036
	Subordinate DE applies	10
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	3	40	Circular arc
106	63	0	4	Simple closed planar curve
106	63	4	2	
110	0	0	281	Line
110	0	1	4	
110	0	2	109	
110	0	3	106	
110	0	4	4	
124	0	0	1	Transformation matrix
212	0	1	91	General note
212	0	2	26	
212	0	3	109	
212	0	4	7	
212	0	5	230	
212	0	6	6	
212	2	3	4	General note - imbedded font change dimension
230	0	0	4	Sectioned area (Standard Crosshatching)
230	0	4	2	
308	0	0	2	Subfigure definition
404	0	0	1	Drawing
406	3	0	1	Property - Level function
406	3	1	1	
406	3	2	1	
406	3	3	1	
406	3	4	1	
406	3	5	1	
406	3	6	1	
406	15	0	1	Property - Name
406	16	0	1	Property - Drawing size
406	17	0	1	Property - Drawing units
408	0	2	1	Single subfigure instance
408	0	3	1	
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	298
1	96
2	137
3	261
4	16
5	231
6	7

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 1046

*** Line Fonts Used in Data ***

100 102 104 106 108 110 112 114

-	-	-	-	-	-	-	-	Undefined
40	-	-	6	-	500	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	4	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116 118 120 122 124 125 126 128

-	-	-	-	1	-	-	-	Undefined
---	---	---	---	---	---	---	---	-----------

<<<< PART OF LOG FILE REMOVED HERE >>>>

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	1046	(0.0010)

*** Colors Used in Data ***

Defaulted	15
Green	4
Blue	171
Yellow	757
White	99

```
*****
*****      ENTITY ANALYSIS      *****
*****
```

*** Entity type: 100

*** Entity type: 106

*** Entity type: 110

-- 504 lines averaging 2.598450E+00 units --

*** Entity type: 124

1 transformation matrices, 1 non-zero translations.

NOTE 2341: 1 matrices contain translation information.

*** Entity type: 212

478 text strings in data file.
Average text aspect ratio in file is 0.8461716.
Minimum text aspect ratio in file is 0.2000000.
Maximum text aspect ratio in file is 1.4365108.

FONTS USED IN FILE

FONT	COUNT	NAME
1	8	Default ASCII Style
1003	470	Drafting Font

*** Entity type: 230

*** Entity type: 308

Subfigure name at D 827: 'JSOWD1'.
Number of included entities = 404.
Subfigure name at D 1193: '*X1'.
Number of included entities = 150.

*** Entity type: 404

Drawing at D 2091 contains 1 views.
Drawing at D 2091 contains 0 annotation entities.

*** Entity type: 406

Independent property at D	5 applies to level 1.
Independent property at D	77 applies to level 2.
Independent property at D	293 applies to level 3.
Independent property at D	417 applies to level 0.
Independent property at D	1349 applies to level 4.
Independent property at D	1517 applies to level 5.
Independent property at D	1755 applies to level 6.

*** Entity type: 408

Subfigure instance at D	829 references subfigure at D	827.
Subfigure instance at D	1197 references subfigure at D	1193.

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
XMIN = Not Set XMAX = Not Set
YMIN = Not Set YMAX = Not Set
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

4011: 1 Problems in the Global section

*** Error Summary ***

0 fatal errors
0 severe errors
1 errors
0 warnings
0 cautions
0 nitpicks
1 notes

*** End of Analysis of d001q001.igs ***

10.1.2 Parser Log - IGESWorks

International TechneGroup Incorporated

Validation Logfile

Date: Tuesday August 16, 1994, 03:41 PM

Model: d001g001.igs

***** Validation Parameters *****

TOLERANCE CONFIGURATION VALUES

ZERO_TOL = 1.000000e-13
MODEL_SPACE_PNT_COIN_TOL = 1.000000e-03
EPSILON_TOL = 1.000000e-08
PARM_SPACE_PNT_COIN_TOL = 1.000000e-08
ISO_PARM_CURVE_TOL = 1.000000e-08
NON_CONV_TOL = 1.000000e-12
KNOT_COIN_TOL = 1.000000e-10
SAME_INTER_TOL = 1.000000e-12
PARALLEL_LINES_TOL = 1.000000e-07
ANGLE_COIN_TOL = 1.000000e-05
PNT_PROJ_TOL = 1.000000e-07
COLIN_TOL = 1.000000e-07
COPLANAR_TOL = 1.000000e-08
ZERO_NORMAL_TOL = 1.000000e-06
SAME_TANGENT_TOL = 1.000000e-04
SAME_CURVATURE_TOL = 1.000000e-04
SAME_DERIVATIVE_TOL = 1.000000e-03
SINGULAR_TOL = 1.000000e-10
MODEL_LINEAR_APPROX_TOL = 1.000000e-03

***** Entity Listing Before Validation *****

Count	Type	Form	Description
40	100	0	Circular Arc
6	106	63	Simple Closed Planar Curve
504	110	0	Line
1	124	0	Transformation Matrix
469	212	0	General Note (Simple)
4	212	2	General Note (Font change)
6	230	0	Section Area (Standard Fill)
2	308	0	Subfigure Definition

1	404	0	Drawing (form 0)
7	406	3	Property (Level Function)
1	406	15	Property (Name)
1	406	16	Property (Drawing Size)
1	406	17	Property (Drawing Units)
2	408	0	Subfigure Instance
1	410	0	View

1046 - Number of entities in selection list

***** Key to Validation Level Descriptions *****

Severity 4 - Explicit Error

Severity 3 - Implicit Error

Severity 2 - Explicit Warning

Severity 1 - Implicit Warning

***** Entity Validation *****

===== Entities Which Were Corrected =====

===== Entities Which Were Not Corrected =====

*** Severity 4 (IEVM_ZERO_LENGTH_ARC_100) ***

This Circular Arc Entity (Type 100) has an effective zero length within the stated tolerance. Start point: %.7e, %.7e. Terminate point: %.7e, %.7e.

Type:Form DE #

----- -----

100:0 381

This occurred on 1 entities

*** Severity 2 (IEVM_BAD_SUBENT_308) ***

This Subfigure Definition entity (308) references an entity (DE #ld) that failed validation.

Type:Form DE #

----- -----

308:0 827

This occurred on 1 entities

*** Severity 1 (IEVM_ZERO_LENGTH_110) ***

This Line entity has a zero length within the stated tolerance.

Type:Form DE #

----- -----

110:0 323, 359

This occurred on 2 entities

Entity Validation Summary:

Type	Form	Entity Count	Number Valid	Number of Corrected		Number of Uncorrected	
				Warnings	Errors	Warnings	Errors
Global Section		1	1	0	0	0	0
100	0	40	39	0	0	0	1
106	63	6	6	0	0	0	0
110	0	504	502	0	0	2	0
124	0	1	1	0	0	0	0
212	0	469	469	0	0	0	0
212	2	4	4	0	0	0	0
230	0	6	6	0	0	0	0
308	0	2	1	0	0	1	0
404	0	1	1	0	0	0	0
406	3	7	7	0	0	0	0
406	15	1	1	0	0	0	0
406	16	1	1	0	0	0	0
406	17	1	1	0	0	0	0
408	0	2	2	0	0	0	0
410	0	1	1	0	0	0	0
Totals:		1047	1043	0	0	3	1

10.1.3 Error Log Preview

ERROR REPORT FOR FILE d001q001.igs

>> File record length is 80

Terminate section report :

File Section	#lines
START	11
GLOBAL	5
DIRECTORY ENTRY	2092
PARAMETER DATA	2152
TERMINATE	1
TOTAL	4261

(Expect 80 X 4261 = 340880 bytes)

----- preliminary format scan complete -----

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #210, DE entry #419 type SECTIONED AREA.
: Field 2, line 383 of PARAMETER DATA section.

230,415,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0; 419P 383110
^

<<<< PART OF LOG FILE REMOVED HERE >>>>

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 210 for graphic output.

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 214 for graphic output.

<<<< PART OF LOG FILE REMOVED HERE >>>>

Found 0 errors and 12 warnings

12. MARKING: MARK THE FOLLOWING IN .06 MINIMUM HIGH CHARACTERS, METHOD LABEL, IN ACCORDANCE WITH MIL-STD-110, USING MARKER (ITEM 11).

- A. "J0000JASSY18IAS16074-1".
 B. "96214ASSY4216074-1 REV 1".
 C. "MFG SEQ NO 1".
 D. "P1".
 E. "P8".
 F. "IJ5".
 G. "INTLK RTN".
 H. "SWITCH PWR".
 I. "SWITCH RTN".
 J. "P3".
 K. "P3".
 L. "P2".
 M. "P5".
 N. "P7".
 O. "(J4)".

"IT REVISION LETTER.

NON-REPEATING MANUFACTURING
SEQUENCE NUMBER.

- F. "INTLK PWR".
 G. "INTLK RTN".
 H. "SWITCH PWR".
 I. "SWITCH RTN".
 J. "P3".
 K. "P3".
 L. "P2".
 M. "P5".
 N. "P7".
 O. "(J4)".

AR	45	96214	806651-2
AR	44	.....	M21053/5-
AR	43	.....	CLR BLK
AR	42	.....	M21053/5-
4	41	.....	MS35649-;
4	40	.....	MS35333-7
4	39	.....	NAS620C6
4	38	96214	532720-3
2	37	96214	530202-1
4	36	.....	NS51957-2
4	35	.....	N39001/01
1	34	.....	N18510/11
1	33	.....	H38510/10
1	32	.....	J181A81608
AR	31	.....	QQB575R36
AR	30	.....	MS3367-4
AR	29	.....	MA610621A

10.1.4 Output CADLeaf

**AFCTN Test Report
94-114**

**AFCTB Test Report
94-113**

10.1.5 Output CALSView

NOTES		318IAS16074	
1	YODER ITEM - SEE SPECIFICATION CONTROL		
2	WIRE IN ACCORDANCE WITH WIRE DRAWING USING WIRE ITEM #21		
3	COLOR IN ACCORDANCE WITH MIL-STD-2006A USING SOLID ITEM #3		
4	SOLDED IN ACCORDANCE WITH F-344, MIL-STD-200 OR MIL-STD-2004		
5	BLISTER IN ACCORDANCE WITH MIL-F-3033/3 USING ISOLATION BLISTER ITEM #1 FROM 42		
6	DISCAPPLATE CONNECTOR ITEM #1 IN ACCORDANCE WITH MIL-SPEC-2004, TYPE L, CLASS 2, CLASS 3, AND CLASS 4. THE PLATE AND DISCAPPLATE ITEM #1, POTTING CRYOGENIC, SHALL NOT EXCEED THE REPRINTED OF THE CONNECTOR BODY BY MORE THAN 200 UNITS.		
7	COAT TERMINAL, RADIATOR (ITEM 11), TERMAL (ITEM 19), AND SWITCH (ITEM 20) IN ACCORDANCE WITH MIL-A-4644A, FORM A, TYPE 1, USING APPLICATOR ITEM #30		
8	TOP COAT MIL-A-4644A FORM A-4644A		
9	COAT TERMINAL, RADIATOR (ITEM 11), TERMAL (ITEM 19), AND SWITCH (ITEM 20) IN ACCORDANCE WITH MIL-A-4644A, FORM A, TYPE 1, USING APPLICATOR ITEM #30		
10	COAT 100 AREAS ON CASE SURFACE OF MICROCONTROLLER ITEM #31 IN ACCORDANCE WITH MIL-A-4644A, GROUP 4, TYPE 1, USING PRIMER ITEM #20 AND APPLICATOR ITEM #30. COATING SHALL NOT EXCEED THE REPRINTED OF THE MICROCONTROLLER BODY BY MORE THAN 10 UNITS.		
11	TE (11), GND (19) OR BATT (20) TOGETHER AT CABLE JUNCTIONS USING STRAP (ITEM 50) AND TIE (ITEM 27) IN ATTACHMENT WITH 4046		
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
151			
152			
153			
154			
155			
156			
157			
158			
159			
160			
161			
162			
163			
164			
165			
166			
167			
168			
169			
170			
171			
172			
173			
174			
175			
176			
177			
178			
179			
180			
181			
182			
183			
184			
185			
186			
187			
188			
189			
190			
191			
192			
193			
194			
195			
196			
197			
198			
199			
200			
201			
202			
203			
204			
205			
206			
207			
208			
209			
210			
211			
212			
213			
214			
215			
216			
217			
218			
219			
220			
221			
222			
223			
224			
225			
226			
227			
228			
229			
230			
231			
232			
233			
234			
235			
236			
237			
238			
239			
240			
241			
242			
243			
244			
245			
246			
247			
248			
249			
250			
251			
252			
253			
254			
255			
256			
257			
258			
259			
260			
261			
262			
263			
264			
265			
266			
267			
268			
269			
270			
271			
272			
273			
274			
275			
276			
277			
278			
279			
280			
281			
282			
283			
284			
285			
286			
287			
288			
289			
290			
291			
292			
293			
294			
295			
296			
297			
298			
299			
300			
301			
302			
303			
304			
305			
306			
307			
308			
309			
310			
311			
312			
313			
314			
315			
316			
317			
318			
319			
320			
321			
322			
323			
324			
325			
326			
327			
328			
329			
330			
331			
332			
333			
334			
335			
336			
337			
338			
339			
340			
341			
342			
343			
344			
345			
346			
347			
348			
349			
350			
351			
352			
353			
354			
355			
356			
357			
358			
359			
360			
361			
362			
363			
364			
365			
366			
367			
368			
369			
370			
371			
372			
373			
374			
375			
376			
377			
378			
379			
380			
381			
382			
383			
384			
385			
386			
387			
388			
389			
390			
391			
392			
393			
394			
395			
396			
397			
398			
399			
400			
401			
402			
403			
404			
405			
406			
407			
408			
409			
410			
411			
412			
413			
414			
415			
416			
417			
418			
419			
420			
421			
422			
423			
424			
425			
426			
427			
428			
429			
430			
431			
432			
433			
434			
435			
436			
437			
438			
439			
440			
441			
442			
443			

10.2 File D001Q002

10.2.1 Parser/Verifier Log

```
*****
*****   IGES PARSER/VERIFIER   *****
*****       MARCH 1994        *****
*****   IGES Data Analysis    *****
*****       (708) 344-1815      *****
*****
```

Input file is d001q002.igs

Checking conformance to CALS Class II (MIL-D-28000A 2/10/92)

Today is August 16, 1994 11:24 AM

```
*****
*****   CHECK FILE SYNTAX   *****
*****
```

Section	Records
Start	31
Global	5
Directory	2092 (1046 Entities)
Parameter	2151
Terminate	1

No syntax errors detected.

```
*****
*****   SUMMARY AND STATISTICS   *****
*****
```

*** File and Product Name Information ***

```
File name from sender      = '/usr3/cadds/parts/scr/4216074-c/1.igs'
File creation Date.Time   = '940803.104939'
Model change Date.Time    = ''
Author                      = 'mda drafting'
Department                  = 'ti-lewisville'
Product name from sender = '/usr3/cadds/parts/scr/4216074-c/1'
Destination product name = '/usr3/cadds/parts/scr/4216074-c/1'
```

*** Parameter Delimiters ***

Delimiter = ','
Terminator = ';'

*** Originating System Data ***

System ID = 'AutoCAD-12_c3 (Sun4/SPARCstation)'
Preprocessor version = 'IGESOUT (v5.1.01 Feb 22 1993)'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 308 Mantissa = 15

*** Global Model Data ***

Model scale = 1.0000E+00
Unit flag = 1
Units = 'IN'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 3.300000E-08
Maximum coordinate = 3.300000E+01

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1046
	Blanked	0
Independence:	Independent	480
	Physically Subordinate	565
	Logically Subordinate	1
	Totally Subordinate	0
Entity use:	Geometry	563
	Annotation	481
	Definition	2
	Other	0
	Logical/Positional	0
	2D parametric	0
	Construction geometry	0
	Not Specified	0

Hierarchy:	Structure DE applies	1036
	Subordinate DE applies	10
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	3	40	Circular arc
106	63	0	4	Simple closed planar curve
106	63	4	2	
110	0	0	281	Line
110	0	1	4	
110	0	2	109	
110	0	3	106	
110	0	4	4	
124	0	0	1	Transformation matrix
212	0	1	91	General note
212	0	2	26	
212	0	3	109	
212	0	4	7	
212	0	5	230	
212	0	6	6	
212	2	3	4	General note - imbedded font change dimension
230	0	0	4	Sectioned area (Standard Crosshatching)
230	0	4	2	
308	0	0	2	Subfigure definition
404	0	0	1	Drawing
406	3	0	1	Property - Level function
406	3	1	1	
406	3	2	1	
406	3	3	1	
406	3	4	1	
406	3	5	1	
406	3	6	1	
406	15	0	1	Property - Name
406	16	0	1	Property - Drawing size
406	17	0	1	Property - Drawing units
408	0	2	1	Single subfigure instance
408	0	3	1	
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	298
1	96
2	137
3	261
4	16
5	231
6	7

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 1046

*** Line Fonts Used in Data ***

100 102 104 106 108 110 112 114

-	-	-	-	-	-	-	-	Undefined
40	-	-	6	-	500	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	4	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116 118 120 122 124 125 126 128

-	-	-	-	1	-	-	-	Undefined
---	---	---	---	---	---	---	---	-----------

<<<< PART OF LOG FILE REMOVED HERE >>>>

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	1046	(0.0010)

*** Colors Used in Data ***

Defaulted	15
Green	4
Blue	171
Yellow	757
White	99

```
*****  
*****      ENTITY ANALYSIS      *****  
*****
```

```
*** Entity type: 100
```

```
*** Entity type: 106
```

```
*** Entity type: 110
```

```
-- 504 lines averaging 2.598450E+00 units --
```

```
*** Entity type: 124
```

```
WARNING 2492: Undefined line font value (0) specified for D 823.  
1 transformation matrices, 1 non-zero translations.
```

```
NOTE 2341: 1 matrices contain translation information.
```

```
*** Entity type: 212
```

```
478 text strings in data file.  
Average text aspect ratio in file is 0.8461716.  
Minimum text aspect ratio in file is 0.2000000.  
Maximum text aspect ratio in file is 1.4365108.
```

FONTS USED IN FILE

FONT	COUNT	NAME
------	-------	------

1	8	Default ASCII Style
1003	470	Drafting Font

```
*** Entity type: 230
```

```
*** Entity type: 308
```

```
Subfigure name at D 3: 'JSOWD1'.  
Number of included entities = 404.
```

```
WARNING 2492: Undefined line font value (0) specified for D 3.  
Subfigure name at D 825: '*X1'.  
Number of included entities = 150.
```

```
WARNING 2492: Undefined line font value (0) specified for D 825.
```

```
*** Entity type: 404
```

```
Drawing at D 1127 contains 1 views.
```

```
Drawing at D 1127 contains 0 annotation entities.
```

```
WARNING 2492: Undefined line font value (0) specified for D 1127.
```

*** Entity type: 406

WARNING 2492: Undefined line font value (0) specified for D 1129.
WARNING 2492: Undefined line font value (0) specified for D 1131.
WARNING 2492: Undefined line font value (0) specified for D 1133.
Independent property at D 1145 applies to level 1.
WARNING 2492: Undefined line font value (0) specified for D 1145.
Independent property at D 1147 applies to level 2.
WARNING 2492: Undefined line font value (0) specified for D 1147.
Independent property at D 1149 applies to level 3.
WARNING 2492: Undefined line font value (0) specified for D 1149.
Independent property at D 1151 applies to level 0.
WARNING 2492: Messages regarding undefined line font suppressed.
Independent property at D 1363 applies to level 4.
Independent property at D 1525 applies to level 5.
Independent property at D 1763 applies to level 6.

*** Entity type: 408

Subfigure instance at D 1 references subfigure at D 3.
ERROR 2266: Subfigure definition (D 3) follows instance entity at D 1.
Subfigure instance at D 821 references subfigure at D 825.
ERROR 2266: Subfigure definition (D 825) follows instance entity at D 821.

*** Entity type: 410

Scale of view at D 1135 is 1.000000E+00.
Orthographic View entity at D 1135 has 0 clipping planes specified.
XMIN = Not Set XMAX = Not Set
YMIN = Not Set YMAX = Not Set
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

2038: 15 Invalid Line font values.

*** Error Summary ***

0 fatal errors
0 severe errors
2 errors
15 warnings
0 cautions
0 nitpicks
1 notes
*** End of Analysis of d001q002.igs ***

10.2.2 Parser Log - IGESWorks

International TechneGroup Incorporated Validation Logfile

Date: Tuesday August 16, 1994, 03:42 PM
Model: d001q002.igs

***** Validation Parameters *****

TOLERANCE CONFIGURATION VALUES

ZERO_TOL = 1.000000e-13
MODEL_SPACE_PNT_COIN_TOL = 1.000000e-03
EPSILON_TOL = 1.000000e-08
PARM_SPACE_PNT_COIN_TOL = 1.000000e-08
ISO_PARM_CURVE_TOL = 1.000000e-08
NON_CONV_TOL = 1.000000e-12
KNOT_COIN_TOL = 1.000000e-10
SAME_INTER_TOL = 1.000000e-12
PARALLEL_LINES_TOL = 1.000000e-07
ANGLE_COIN_TOL = 1.000000e-05
PNT_PROJ_TOL = 1.000000e-07
COLIN_TOL = 1.000000e-07
COPLANAR_TOL = 1.000000e-08
ZERO_NORMAL_TOL = 1.000000e-06
SAME_TANGENT_TOL = 1.000000e-04
SAME_CURVATURE_TOL = 1.000000e-04
SAME_DERIVATIVE_TOL = 1.000000e-03
SINGULAR_TOL = 1.000000e-10
MODEL_LINEAR_APPROX_TOL = 1.000000e-03

***** Entity Listing Before Validation *****

Count	Type	Form	Description
40	100	0	Circular Arc
6	106	63	Simple Closed Planar Curve
504	110	0	Line
1	124	0	Transformation Matrix
469	212	0	General Note (Simple)
4	212	2	General Note (Font change)
6	230	0	Section Area (Standard Fill)
2	308	0	Subfigure Definition
1	404	0	Drawing (form 0)
7	406	3	Property (Level Function)

1	406	15	Property (Name)
1	406	16	Property (Drawing Size)
1	406	17	Property (Drawing Units)
2	408	0	Subfigure Instance
1	410	0	View

1046 - Number of entities in selection list

***** Key to Validation Level Descriptions *****

Severity 4 - Explicit Error
Severity 3 - Implicit Error
Severity 2 - Explicit Warning
Severity 1 - Implicit Warning

***** Entity Validation *****

===== Entities Which Were Corrected =====

===== Entities Which Were Not Corrected =====

*** Severity 4 (IEVM_ZERO_LENGTH_ARC_100) ***

This Circular Arc Entity (Type 100) has an effective zero length within the stated tolerance. Start point: %.7e, %.7e. Terminate point: %.7e, %.7e.

Type:Form DE #

----- ----

100:0 377

This occurred on 1 entities

*** Severity 2 (IEVM_BAD_SUBENT_308) ***

This Subfigure Definition entity (308) references an entity (DE %ld) that failed validation.

Type:Form DE #

----- ----

308:0 3

This occurred on 1 entities

*** Severity 1 (IEVM_ZERO_LENGTH_110) ***

This Line entity has a zero length within the stated tolerance.

Type:Form DE #

----- ----

110:0 319, 355

This occurred on 2 entities

Entity Validation Summary:

Type	Form	Entity Count	Number Valid	Number of Corrected		Number of Uncorrected	
				Warnings	Errors	Warnings	Errors
Global Section		1	1	0	0	0	0
100	0	40	39	0	0	0	1
106	63	6	6	0	0	0	0
110	0	504	502	0	0	2	0
124	0	1	1	0	0	0	0
212	0	469	469	0	0	0	0
212	2	4	4	0	0	0	0
230	0	6	6	0	0	0	0
308	0	2	1	0	0	1	0
404	0	1	1	0	0	0	0
406	3	7	7	0	0	0	0
406	15	1	1	0	0	0	0
406	16	1	1	0	0	0	0
406	17	1	1	0	0	0	0
408	0	2	2	0	0	0	0
410	0	1	1	0	0	0	0
Totals:		1047	1043	0	0	3	1

10.2.3 Error Log Preview

ERROR REPORT FOR FILE d001q002.igs

>> File record length is 80

Terminate section report :

File Section	#lines
START	31
GLOBAL	5
DIRECTORY ENTRY	2092
PARAMETER DATA	2151
TERMINATE	1
TOTAL	4280

(Expect 80 X 4280 = 342400 bytes)

----- preliminary format scan complete -----

>> WARNING: Cannot use maximum power of 10 requested.

: Requested maximum power of 308 using 307.

: Field 11 line 3 of GLOBAL section. (Max. Exp. for Double)

1993),32,38,6,308,15,33H/usr3/cadds/parts/scr/4216074-c/1,1.0D0,1,2HIN, G 3

~~~

----->> WARNING: Sectioned Area type 19 not supported

: Reading entity #206, DE entry #411 type SECTIONED AREA.

: Field 2, line 402 of PARAMETER DATA section.

230,413,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0; 411P 402106

~~~

----->> WARNING: Sectioned Area type 19 not supported

: Reading entity #210, DE entry #419 type SECTIONED AREA.

: Field 2, line 407 of PARAMETER DATA section.

230,421,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0; 419P 407106

~~~

----->> WARNING: Sectioned Area type 19 not supported

: Reading entity #212, DE entry #423 type SECTIONED AREA.

: Field 2, line 410 of PARAMETER DATA section.

230,425,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0; 423P 410106

~~~

```
>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #215, DE entry #429 type SECTIONED AREA.
      : Field 2, line 414 of PARAMETER DATA section.
230,431,19,0.0D0,0.0D0,0.0D0,0.0D0,0;          429P    414106
^^

-----  

>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #569, DE entry #1137 type SECTIONED AREA.
      : Field 2, line 1123 of PARAMETER DATA section.
230,1139,19,0.0D0,0.0D0,0.0D0,0.0D0,0;         1137P   1123106
^^

-----  

>> WARNING: Sectioned Area type 19 not supported
      : Reading entity #571, DE entry #1141 type SECTIONED AREA.
      : Field 2, line 1127 of PARAMETER DATA section.
230,1143,19,0.0D0,0.0D0,0.0D0,0.0D0,0;         1141P   1127106
^^

-----  

>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 206 for graphic output.
-----  

>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 210 for graphic output.
-----  

>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 212 for graphic output.
-----  

>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 215 for graphic output.
-----  

>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 569 for graphic output.
-----  

>> WARNING: Unsupported sectioned area type 19 modified to 16
      : in entity 571 for graphic output.
```

Found 0 errors and 13 warnings

10.2.4 Output CALSView for Windows

3181AS16074

NOTES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
1	VENDOR ITEM - SEE SPECIFICATION CONTROL DRAWING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
2	WIRE IN ACCORDANCE WITH WIRING DIAGRAM USING WIRE (ITEM 22)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
3	SOLDER IN ACCORDANCE WITH MIL-STD-2000A, USING SOLDER (ITEM 23)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
4	SOLDER IN ACCORDANCE WITH F-1341, METHOD 02, USM (ITEM 24)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
5	SLITTE IN ACCORDANCE WITH MIL-23033/5, USING INSULATION SLEEVING (ITEM 21, ITEM 42 AND ITEM 44)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
6	ENCAPSULATED CONNECTOR (ITEM 3) IN ACCORDANCE WITH MIL-S-222E, TYPE 4, GRATE 2, CLASS B-2, LONG PRIMER (ITEM 26) AND COMPOUND (ITEM 27). POTTING ENVELOPE SHALL NOT EXCEED THE PERIMETER OF THE CONNECTOR BODY BY MORE THAN 150 MAXIMUM.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
7	COAT TERMINAL BOARD (ITEM 13), TERMINAL (ITEM 14) AND SWITCH (ITEM 15) IN ACCORDANCE WITH MIL-A-4854, GROUP I, TYPE L, LONG PRIMER (ITEM 26) AND ADHESIVE (ITEM 27). COATING SHALL NOT EXCEED THE PERIMETER OF THE MICROCUT BODY BY MORE THAN 10 MAXIMUM.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
8	TORQUE ITEM 36 TO 80 ± 45 N·m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
9	COAT 100 PERCENT OF MOUNTING HARDWARE, TERMINALS AND SUPPORT LEADS OF MICROCUT (ITEMS 23 AND 34) AND CAPACITORS (ITEM 35) IN ACCORDANCE WITH MIL-A-4854, GROUP I, TYPE L, USING PRIMER (ITEM 26) AND ADHESIVE (ITEM 27). COATING THICKNESS SHALL NOT EXCEED .01																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
10	COAT 100 PERCENT CASE SURFACE OF MICROCUT (ITEM 34) IN ACCORDANCE WITH MIL-A-4854, GROUP I, TYPE L, LONG PRIMER (ITEM 26) AND ADHESIVE (ITEM 27). COATING SHALL NOT EXCEED THE PERIMETER OF THE MICROCUT BODY BY MORE THAN 10 MAXIMUM.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
11	TE ALL SHIELDS (ITEM 29) TOGETHER AT CABLE JUNCTIONS USING STRAP (ITEM 30) AND WIRE (ITEM 22) IN ACCORDANCE WITH NOTE 1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
12	WIRING MARK THE FOLLOWING IN DS UPPERCASE HON CHARACTERS, METHOD LABEL IN ACCORDANCE WITH MIL-STO-100, USING MARKER (ITEM 12)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
A	"30003455Y3016158074-T"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
B	"102MA051420074-1 REV []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
C	"MFG STD NO []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
D	"P/N []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
E	"P/N [] []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
F	"[] TALK PRT"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
G	"[] TALK RPT"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
H	"SWITCH PRT"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
I	"SWITCH RPT"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
J	"P/N []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
K	"P/N []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
L	"P/N []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
M	"P/N []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
N	"P/N []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
P	"P/N []"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
13	ELECTROSTATIC DISCHARGE CONTROL PROGRAM FOR PROTECTION OF ELECTRICAL EQUIPMENT. EQUIPMENT SHALL BE IN ACCORDANCE WITH DOD-STD-1995 AND DOD-HDBK-263. EQUIPMENT SHALL BE IN ACCORDANCE WITH DOD-STD-1995 AND DOD-HDBK-263. CLASS 3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
14	ALL WIRING AND COMPONENTS SHALL BE CONTAINED WITHIN ENVELOPE SHOWN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
15	WIRE BRAID SHALL ENCOMPASS ENTIRE LENGTH OF CABLE AND SHALL BE SECURED UNDER BACKSHOULDS (ITEMS 9, 10 AND 11) TO ENSURE CONTACT WITH BACKSHOULDS. TAPE (ITEM 43) SHALL BE USED OVER BRAID TO PREVENT CONTACT WITH ITEMS 5, 17 AND 18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
CAUTION SENSITIVE ELECTRONIC DEVICES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
<p style="text-align: center;">REVISIONS</p> <p style="text-align: center;">PART NO. BY APPROVING NO. RELEASE DATE BY APPROVING NO. SPECIFICATION NO. NOTE ZONE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center; padding: 5px;">REVISIONS</td> <td colspan="2" style="text-align: center; padding: 5px;">PART NO. BY APPROVING NO. RELEASE DATE BY APPROVING NO. SPECIFICATION NO. NOTE ZONE</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">1</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">2</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">3</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">4</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">5</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">6</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">7</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">8</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">9</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">10</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">11</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">12</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">13</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">14</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">15</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">16</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">17</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">18</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">19</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">20</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">21</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">22</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">23</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">24</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">25</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">26</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">27</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">28</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">29</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">30</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">31</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">32</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">33</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">34</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">35</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">36</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">37</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">38</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">39</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">40</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">41</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">42</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">43</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">44</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">45</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">46</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">47</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">48</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">49</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">50</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">51</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">52</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">53</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">54</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">55</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">56</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">57</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">58</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">59</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">60</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">61</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">62</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">63</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">64</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">65</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">66</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">67</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">68</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">69</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">70</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">71</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">72</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">73</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">74</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">75</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">76</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">77</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">78</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">79</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">80</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">81</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">82</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">83</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">84</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">85</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">86</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">87</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">88</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">89</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">90</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">91</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">92</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">93</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">94</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">95</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">96</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">97</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">98</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">99</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">100</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">101</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">102</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">103</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">104</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">105</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">106</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">107</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">108</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">109</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">110</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">111</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">112</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">113</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">114</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">115</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">116</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">117</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">118</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">119</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">120</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">121</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">122</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">123</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">124</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">125</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">126</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">127</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">128</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">129</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">130</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">131</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">132</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">133</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">134</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">135</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">136</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">137</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">138</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">139</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">140</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">141</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">142</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">143</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">144</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">145</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">146</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">147</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">148</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">149</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">150</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">151</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">152</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">153</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">154</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">155</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">156</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">157</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">158</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">159</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">160</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">161</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">162</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;">163</td> <td colspan="2" style="text-align: center; padding: 5px;">3181AS16074</</td></tr></table>		REVISIONS		PART NO. BY APPROVING NO. RELEASE DATE BY APPROVING NO. SPECIFICATION NO. NOTE ZONE		1		3181AS16074		2		3181AS16074		3		3181AS16074		4		3181AS16074		5		3181AS16074		6		3181AS16074		7		3181AS16074		8		3181AS16074		9		3181AS16074		10		3181AS16074		11		3181AS16074		12		3181AS16074		13		3181AS16074		14		3181AS16074		15		3181AS16074		16		3181AS16074		17		3181AS16074		18		3181AS16074		19		3181AS16074		20		3181AS16074		21		3181AS16074		22		3181AS16074		23		3181AS16074		24		3181AS16074		25		3181AS16074		26		3181AS16074		27		3181AS16074		28		3181AS16074		29		3181AS16074		30		3181AS16074		31		3181AS16074		32		3181AS16074		33		3181AS16074		34		3181AS16074		35		3181AS16074		36		3181AS16074		37		3181AS16074		38		3181AS16074		39		3181AS16074		40		3181AS16074		41		3181AS16074		42		3181AS16074		43		3181AS16074		44		3181AS16074		45		3181AS16074		46		3181AS16074		47		3181AS16074		48		3181AS16074		49		3181AS16074		50		3181AS16074		51		3181AS16074		52		3181AS16074		53		3181AS16074		54		3181AS16074		55		3181AS16074		56		3181AS16074		57		3181AS16074		58		3181AS16074		59		3181AS16074		60		3181AS16074		61		3181AS16074		62		3181AS16074		63		3181AS16074		64		3181AS16074		65		3181AS16074		66		3181AS16074		67		3181AS16074		68		3181AS16074		69		3181AS16074		70		3181AS16074		71		3181AS16074		72		3181AS16074		73		3181AS16074		74		3181AS16074		75		3181AS16074		76		3181AS16074		77		3181AS16074		78		3181AS16074		79		3181AS16074		80		3181AS16074		81		3181AS16074		82		3181AS16074		83		3181AS16074		84		3181AS16074		85		3181AS16074		86		3181AS16074		87		3181AS16074		88		3181AS16074		89		3181AS16074		90		3181AS16074		91		3181AS16074		92		3181AS16074		93		3181AS16074		94		3181AS16074		95		3181AS16074		96		3181AS16074		97		3181AS16074		98		3181AS16074		99		3181AS16074		100		3181AS16074		101		3181AS16074		102		3181AS16074		103		3181AS16074		104		3181AS16074		105		3181AS16074		106		3181AS16074		107		3181AS16074		108		3181AS16074		109		3181AS16074		110		3181AS16074		111		3181AS16074		112		3181AS16074		113		3181AS16074		114		3181AS16074		115		3181AS16074		116		3181AS16074		117		3181AS16074		118		3181AS16074		119		3181AS16074		120		3181AS16074		121		3181AS16074		122		3181AS16074		123		3181AS16074		124		3181AS16074		125		3181AS16074		126		3181AS16074		127		3181AS16074		128		3181AS16074		129		3181AS16074		130		3181AS16074		131		3181AS16074		132		3181AS16074		133		3181AS16074		134		3181AS16074		135		3181AS16074		136		3181AS16074		137		3181AS16074		138		3181AS16074		139		3181AS16074		140		3181AS16074		141		3181AS16074		142		3181AS16074		143		3181AS16074		144		3181AS16074		145		3181AS16074		146		3181AS16074		147		3181AS16074		148		3181AS16074		149		3181AS16074		150		3181AS16074		151		3181AS16074		152		3181AS16074		153		3181AS16074		154		3181AS16074		155		3181AS16074		156		3181AS16074		157		3181AS16074		158		3181AS16074		159		3181AS16074		160		3181AS16074		161		3181AS16074		162		3181AS16074		163		3181AS16074</	
REVISIONS		PART NO. BY APPROVING NO. RELEASE DATE BY APPROVING NO. SPECIFICATION NO. NOTE ZONE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
1		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
2		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
3		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
4		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
5		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
6		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
7		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
8		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
9		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
10		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
11		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
12		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
13		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
14		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
15		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
16		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
17		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
18		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
19		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
20		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
21		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
22		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
23		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
24		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
25		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
26		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
27		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
28		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
29		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
30		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
31		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
32		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
33		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
34		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
35		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
36		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
37		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
38		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
39		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
40		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
41		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
42		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
43		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
44		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
45		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
46		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
47		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
48		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
49		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
50		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
51		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
52		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
53		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
54		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
55		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
56		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
57		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
58		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
59		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
60		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
61		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
62		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
63		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
64		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
65		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
66		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
67		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
68		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
69		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
70		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
71		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
72		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
73		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
74		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
75		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
76		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
77		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
78		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
79		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
80		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
81		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
82		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
83		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
84		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
85		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
86		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
87		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
88		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
89		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
90		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
91		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
92		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
93		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
94		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
95		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
96		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
97		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
98		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
99		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
100		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
101		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
102		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
103		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
104		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
105		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
106		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
107		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
108		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
109		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
110		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
111		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
112		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
113		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
114		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
115		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
116		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
117		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
118		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
119		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
120		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
121		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
122		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
123		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
124		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
125		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
126		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
127		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
128		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
129		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
130		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
131		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
132		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
133		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
134		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
135		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
136		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
137		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
138		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
139		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
140		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
141		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
142		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
143		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
144		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
145		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
146		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
147		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
148		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
149		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
150		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
151		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
152		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
153		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
154		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
155		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
156		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
157		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
158		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
159		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
160		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
161		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
162		3181AS16074																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
163		3181AS16074</																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

10.3 File D001Q003

10.3.1 Parser/Verifier Log

```
*****
***** IGES PARSER/VERIFIER *****
***** MARCH 1994 *****
***** IGES Data Analysis *****
***** (708) 344-1815 *****
*****
```

```
Input file is d001q003.igs
Checking conformance to CALS Class II (MIL-D-28000A 2/10/92)
Today is August 16, 1994 11:24 AM
```

```
*****
***** CHECK FILE SYNTAX *****
*****
```

Section	Records
Start	12
Global	5
Directory	1882 (941 Entities)
Parameter	2055
Terminate	1

```
No syntax errors detected.
```

```
*****
***** SUMMARY AND STATISTICS *****
*****
```

```
*** File and Product Name Information ***
```

```
File name from sender = '/usr2/cadds/parts/scr/4216074-c/3.igs'
File creation Date.Time = '940719.104710'
Model change Date.Time = '940719.104704'
Author = 'mda drafting'
Department = 'ti-lewisville'
Product name from sender = '/usr2/cadds/parts/scr/4216074-c/3'
Destination product name = '/usr2/cadds/parts/scr/4216074-c/3'
```

*** Parameter Delimiters ***

Delimiter = ','
Terminator = ';'

*** Originating System Data ***

System ID = 'AutoCAD-12_c3 (Sun4/SPARCstation)'
Preprocessor version = 'IGESOUT (v5.1.01 Feb 22 1993)'
Specification version = 9 (IGES 5.1)
ERROR 4048: Illegal specification version for CALS Class II specified.

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 99 Mantissa = 15

*** Global Model Data ***

Model scale = 1.0000E+00
Unit flag = 1
Units = 'IN'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 3.300000E-08
Maximum coordinate = 3.300000E+01

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	941
	Blanked	0
Independence:	Independent	688
	Physically Subordinate	252
	Logically Subordinate	1
	Totally Subordinate	0
Entity use:	Geometry	763
	Annotation	174
	Definition	4
	Other	0
	Logical/Positional	0
	2D parametric	0
	Construction geometry	0
	Not Specified	0

Hierarchy:	Structure DE applies	820
	Subordinate DE applies	121
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	4	63	Circular arc
100	0	5	56	
102	0	5	50	Composite curve
106	11	4	8	Copious data - Piecewise planar, linear string (2D linear path)
106	63	0	5	Simple closed planar curve
106	63	4	2	
106	63	5	41	
110	0	2	46	Line
110	0	4	248	
110	0	5	167	
110	0	6	8	
110	0	7	8	
124	0	0	28	Transformation matrix
212	0	1	19	General note
212	0	2	25	
212	0	3	5	
212	0	5	46	
212	0	7	19	
212	2	5	12	General note - imbedded font change dimension
230	0	0	5	Sectioned area (Standard Crosshatching)
230	0	5	41	
308	0	0	4	Subfigure definition
404	0	0	1	Drawing
406	3	0	1	Property - Level function
406	3	1	1	
406	3	2	1	
406	3	3	1	
406	3	4	1	
406	3	5	1	
406	3	6	1	
406	3	7	1	
406	5	0	1	Property - Line widening
406	15	0	1	Property - Name
406	16	0	1	Property - Drawing size
406	17	0	1	Property - Drawing units
408	0	2	1	Single subfigure instance
408	0	4	5	

408	0	5	15	
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	49
1	20
2	73
3	6
4	327
5	429
6	9
7	28

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 941

*** Line Fonts Used in Data ***

100 102 104 106 108 110 112 114

-	-	-	-	-	-	-	-	Undefined
119	50	-	56	-	465	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	4	-	-	Phantom
-	-	-	-	-	8	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116 118 120 122 124 125 126 128

-	-	-	-	28	-	-	-	Undefined
---	---	---	---	----	---	---	---	-----------

<<<< PART OF LOG FILE REMOVED HERE >>>>

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	941	(0.0010)

*** Colors Used in Data ***

Defaulted	46
Green	4
Blue	21
Yellow	481
Magenta	8
White	381

***** ENTITY ANALYSIS *****

*** Entity type: 100

*** Entity type: 102

*** Entity type: 106

*** Entity type: 110

-- 477 lines averaging 1.423220E+00 units --

*** Entity type: 124

28 transformation matrices, 20 non-zero translations.

NOTE 2341: 20 matrices contain translation information.

*** Entity type: 212

153 text strings in data file.
Average text aspect ratio in file is 0.7535013.
Minimum text aspect ratio in file is 0.2400000.
Maximum text aspect ratio in file is 1.1555556.

FONTS USED IN FILE

FONT	COUNT	NAME
------	-------	------

1003	153	Drafting Font
------	-----	---------------

*** Entity type: 230

*** Entity type: 308

Subfigure name at D 205: 'JSOWD2'.
Number of included entities = 94.
Subfigure name at D 533: 'ARROW'.
Number of included entities = 1.
Subfigure name at D 697: 'MARKING'.
Number of included entities = 1.
Subfigure name at D 1443: 'HW-36'.
Number of included entities = 2.

*** Entity type: 404

Drawing at D 1881 contains 1 views.
Drawing at D 1881 contains 0 annotation entities.

*** Entity type: 406

Independent property at D 5 applies to level 1.
Independent property at D 21 applies to level 2.
Independent property at D 145 applies to level 0.

<<<< PART OF LOG FILE REMOVED HERE >>>>

*** Entity type: 408

Subfigure instance at D 207 references subfigure at D 205.
Subfigure instance at D 537 references subfigure at D 533.
Subfigure instance at D 575 references subfigure at D 533.
Subfigure instance at D 599 references subfigure at D 533.

<<<< PART OF LOG FILE REMOVED HERE >>>>

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
XMIN = Not Set XMAX = Not Set
YMIN = Not Set YMAX = Not Set
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

4011: 1 Problems in the Global section

*** Error Summary ***

0 fatal errors
0 severe errors
1 errors
0 warnings
0 cautions
0 nitpicks
1 notes

*** End of Analysis of d001q003.igs ***

10.3.2 Parser Log - IGESWorks

International TechneGroup Incorporated
Validation Logfile

Date: Tuesday August 16, 1994, 03:43 PM
Model: d001q003.igs

***** Validation Parameters *****

TOLERANCE CONFIGURATION VALUES

ZERO_TOL = 1.000000e-13
MODEL_SPACE_PNT_COIN_TOL = 1.000000e-03
EPSILON_TOL = 1.000000e-08
PARM_SPACE_PNT_COIN_TOL = 1.000000e-08
ISO_PARM_CURVE_TOL = 1.000000e-08
NON_CONV_TOL = 1.000000e-12
KNOT_COIN_TOL = 1.000000e-10
SAME_INTER_TOL = 1.000000e-12
PARALLEL_LINES_TOL = 1.000000e-07
ANGLE_COIN_TOL = 1.000000e-05
PNT_PROJ_TOL = 1.000000e-07
COLIN_TOL = 1.000000e-07
COPLANAR_TOL = 1.000000e-08
ZERO_NORMAL_TOL = 1.000000e-06
SAME_TANGENT_TOL = 1.000000e-04
SAME_CURVATURE_TOL = 1.000000e-04
SAME_DERIVATIVE_TOL = 1.000000e-03
SINGULAR_TOL = 1.000000e-10
MODEL_LINEAR_APPROX_TOL = 1.000000e-03

***** Entity Listing Before Validation *****

Count	Type	Form	Description
119	100	0	Circular Arc
50	102	0	Composite Curve
8	106	11	Planar Piecewise Linear Curve
48	106	63	Simple Closed Planar Curve
477	110	0	Line
28	124	0	Transformation Matrix
114	212	0	General Note (Simple)
12	212	2	General Note (Font change)
46	230	0	Section Area (Standard Fill)
4	308	0	Subfigure Definition
1	404	0	Drawing (form 0)

8	406	3	Property (Level Function)
1	406	5	Property (Line Widening)
1	406	15	Property (Name)
1	406	16	Property (Drawing Size)
1	406	17	Property (Drawing Units)
21	408	0	Subfigure Instance
1	410	0	View

941 - Number of entities in selection list

***** Key to Validation Level Descriptions *****

Severity 4 - Explicit Error
Severity 3 - Implicit Error
Severity 2 - Explicit Warning
Severity 1 - Implicit Warning

***** Entity Validation *****

===== Entities Which Were Corrected =====

===== Entities Which Were Not Corrected =====

Entity Validation Summary:

Type	Form	Entity Count	Number Valid	Number of Warnings	Number of Errors	Number of Uncorrected Warnings	Number of Uncorrected Errors
Global Section		1	1	0	0	0	0
100	0	119	119	0	0	0	0
102	0	50	50	0	0	0	0
106	11	8	8	0	0	0	0
106	63	48	48	0	0	0	0
110	0	477	477	0	0	0	0
124	0	28	28	0	0	0	0
212	0	114	114	0	0	0	0
212	2	12	12	0	0	0	0
230	0	46	46	0	0	0	0
308	0	4	4	0	0	0	0
404	0	1	1	0	0	0	0
406	3	8	8	0	0	0	0
406	5	1	1	0	0	0	0
406	15	1	1	0	0	0	0
406	16	1	1	0	0	0	0
406	17	1	1	0	0	0	0
408	0	21	21	0	0	0	0
410	0	1	1	0	0	0	0
Totals:		942	942	0	0	0	0

10.3.3 Error Log Preview

ERROR REPORT FOR FILE d001q003.igs

>> File record length is 80
Terminate section report :

File Section	#lines
START	12
GLOBAL	5
DIRECTORY ENTRY	1882
PARAMETER DATA	2055
TERMINATE	1
TOTAL	3955

(Expect 80 X 3955 = 316400 bytes)

----- preliminary format scan complete -----

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #74, DE entry #147 type SECTIONED AREA.
: Field 2, line 113 of PARAMETER DATA section.

230,143,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0;
147P 113110

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #78, DE entry #155 type SECTIONED AREA.
: Field 2, line 118 of PARAMETER DATA section.

230,153,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0;
155P 118106

<<<< PART OF LOG FILE REMOVED HERE >>>>

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 74 for graphic output.

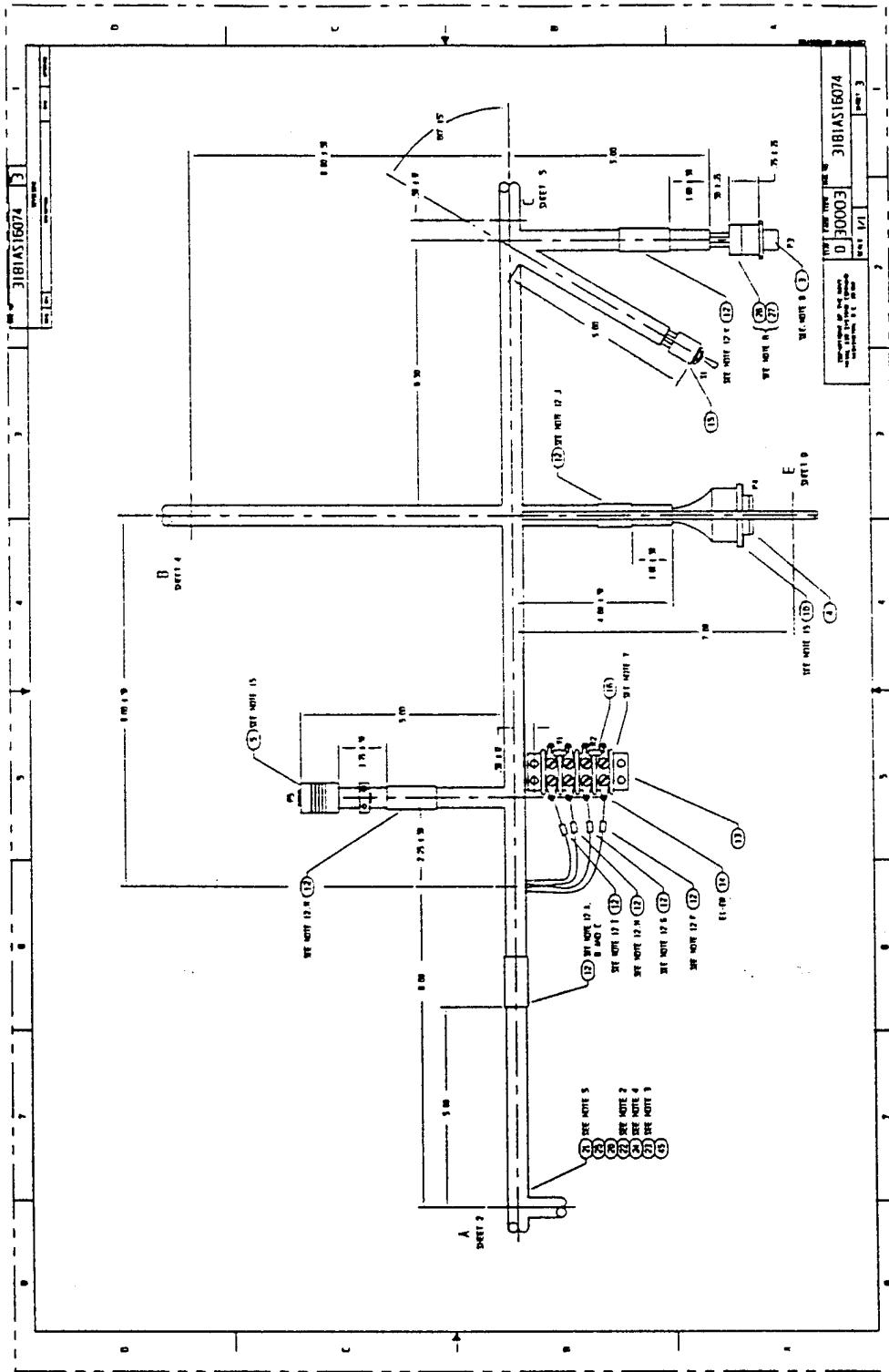
>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 78 for graphic output.

<<<< PART OF LOG FILE REMOVED HERE >>>>

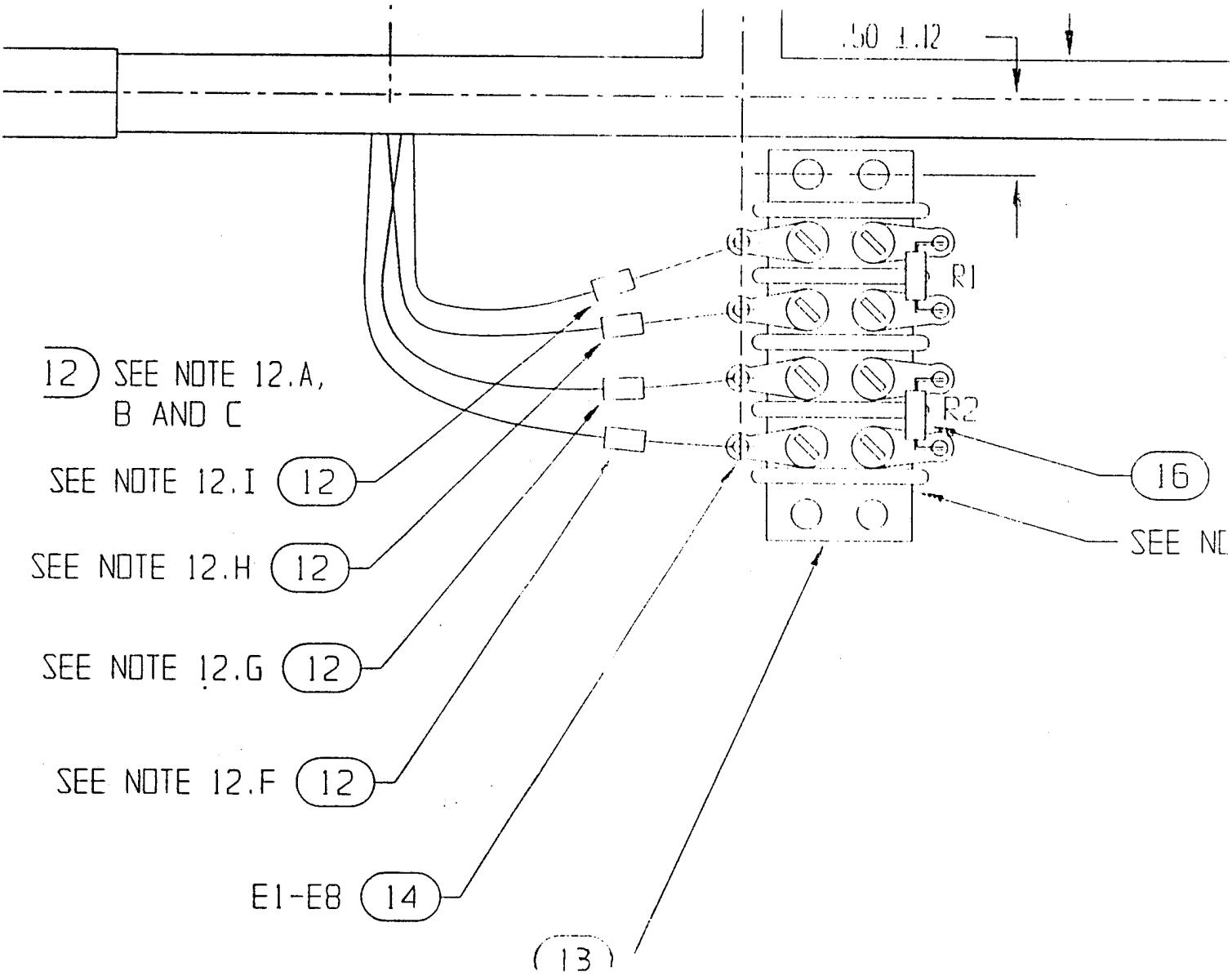
>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 925 for graphic output.

Found 0 errors and 106 warnings

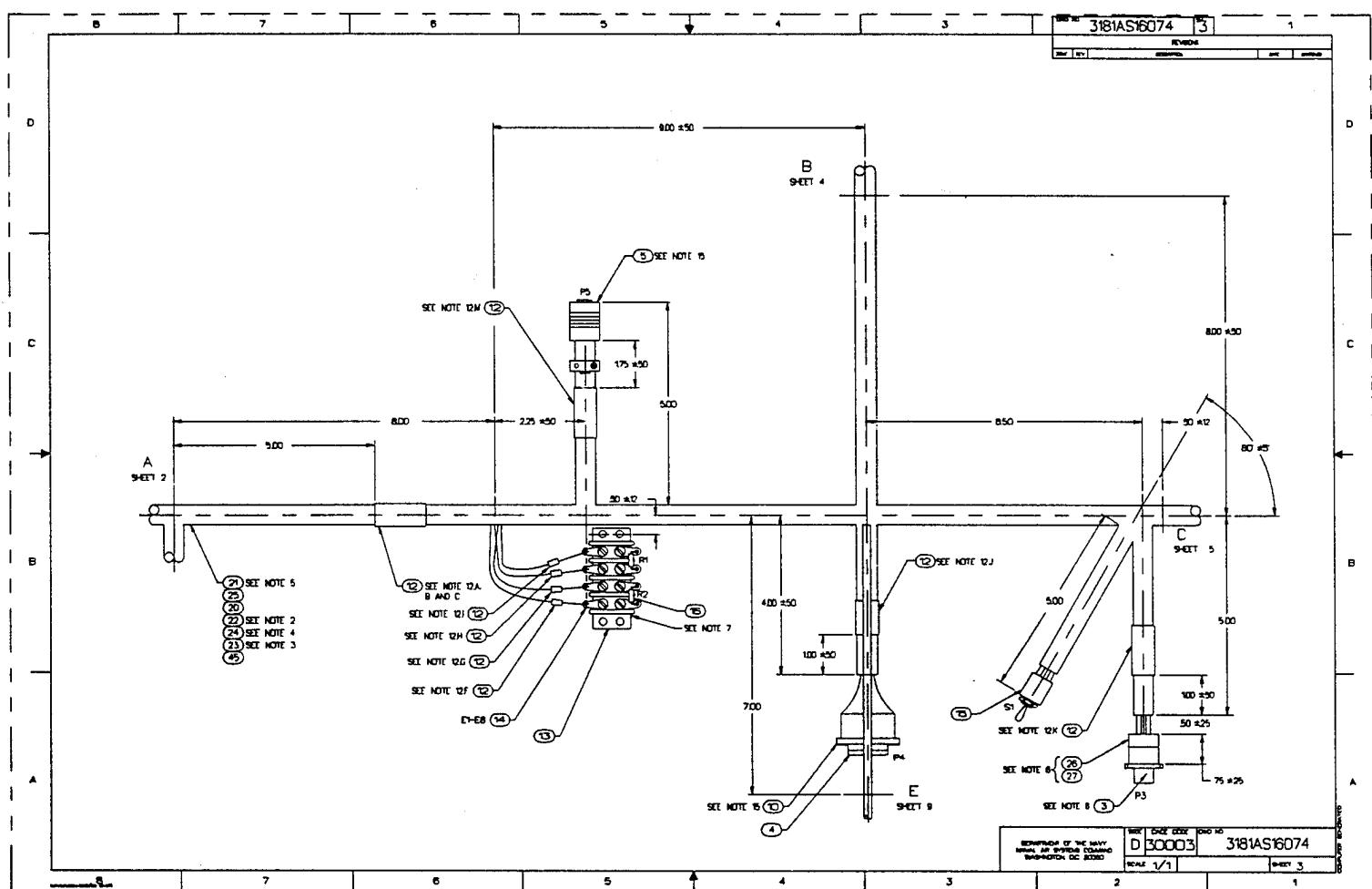
10.3.4 Output Cadkey v6.0



10.3.5 Output Cadkey v6.0 Detail



10.3.6 Output CALSView for Windows



10.4 File D001Q004

10.4.1 Parser/Verifier Log

```
*****
*****   IGES PARSER/VERIFIER   *****
*****       MARCH 1994        *****
*****   IGES Data Analysis    *****
*****       (708) 344-1815      *****
*****
```

```
Input file is d001q004.igs
Checking conformance to CALS Class II (MIL-D-28000A 2/10/92)
Today is August 16, 1994 11:24 AM
```

```
*****
*****   CHECK FILE SYNTAX   *****
*****
```

Section	Records
Start	32
Global	5
Directory	1880 (940 Entities)
Parameter	2053
Terminate	1

```
No syntax errors detected.
```

```
*****
*****   SUMMARY AND STATISTICS   *****
*****
```

```
*** File and Product Name Information ***
```

```
File name from sender      = '/usr2/cadds/parts/scr/4216074-c/3.igs'
File creation Date.Time    = '940803.105354'
Model change Date.Time     = ''
Author                      = 'mda drafting'
Department                  = 'ti-lewisville'
Product name from sender   = '/usr2/cadds/parts/scr/4216074-c/3'
Destination product name   = '/usr2/cadds/parts/scr/4216074-c/3'
```

*** Parameter Delimiters ***

Delimiter = ','
Terminator = ';'

*** Originating System Data ***

System ID = 'AutoCAD-12_c3 (Sun4/SPARCstation)'
Preprocessor version = 'IGESOUT (v5.1.01 Feb 22 1993)'
Specification version = 6 (IGES 4.0)

*** Precision levels ***

Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 308 Mantissa = 15

*** Global Model Data ***

Model scale = 1.0000E+00
Unit flag = 1
Units = 'IN'
Line weights = 32767
Maximum line thickness = 3.276700E+01
Minimum line thickness = 1.000000E-03
Granularity = 3.300000E-08
Maximum coordinate = 3.300000E+01

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	940
	Blanked	0
Independence:	Independent	688
	Physically Subordinate	251
	Logically Subordinate	1
	Totally Subordinate	0
Entity use:	Geometry	762
	Annotation	174
	Definition	4
	Other	0
	Logical/Positional	0
	2D parametric	0
	Construction geometry	0
	Not Specified	0

Hierarchy:	Structure DE applies	819
	Subordinate DE applies	121
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
100	0	4	63	Circular arc
100	0	5	56	
102	0	5	50	Composite curve
106	11	4	8	Copious data - Piecewise planar, linear string (2D linear path)
106	63	0	5	Simple closed planar curve
106	63	4	2	
106	63	5	41	
110	0	2	46	Line
110	0	4	248	
110	0	5	167	
110	0	6	8	
110	0	7	8	
124	0	0	28	Transformation matrix
212	0	1	19	General note
212	0	2	25	
212	0	3	5	
212	0	5	46	
212	0	7	19	
212	2	5	12	General note - imbedded font change dimension
230	0	0	5	Sectioned area (Standard Crosshatching)
230	0	5	41	
308	0	0	4	Subfigure definition
404	0	0	1	Drawing
406	3	0	1	Property - Level function
406	3	1	1	
406	3	2	1	
406	3	3	1	
406	3	4	1	
406	3	5	1	
406	3	6	1	
406	3	7	1	
406	15	0	1	Property - Name
406	16	0	1	Property - Drawing size
406	17	0	1	Property - Drawing units
408	0	2	1	Single subfigure instance
408	0	4	5	
408	0	5	15	
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	48
1	20
2	73
3	6
4	327
5	429
6	9
7	28

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 940

*** Line Fonts Used in Data ***

100 102 104 106 108 110 112 114

-	-	-	-	-	-	-	-	Undefined
119	50	-	56	-	465	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	4	-	-	Phantom
-	-	-	-	-	8	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116 118 120 122 124 125 126 128

- - - - 28 - - - Undefined

<<<< PART OF LOG FILE REMOVED HERE >>>>

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	940	(0.0010)

*** Colors Used in Data ***

Defaulted	45
Green	4
Blue	21
Yellow	481
Magenta	8
White	381

***** ENTITY ANALYSIS *****

*** Entity type: 100

*** Entity type: 102

*** Entity type: 106

*** Entity type: 110

-- 477 lines averaging 1.423220E+00 units --

*** Entity type: 124

WARNING 2492: Undefined line font value (0) specified for D 203.
WARNING 2492: Undefined line font value (0) specified for D 213. WARNING
2492: Messages regarding undefined line font suppressed.
28 transformation matrices, 20 non-zero translations.
NOTE 2341: 20 matrices contain translation information.

*** Entity type: 212

153 text strings in data file.
Average text aspect ratio in file is 0.7535013.
Minimum text aspect ratio in file is 0.2400000.
Maximum text aspect ratio in file is 1.1555556.

FONTS USED IN FILE

FONT	COUNT	NAME
------	-------	------

1003	153	Drafting Font
------	-----	---------------

*** Entity type: 230

*** Entity type: 308

Subfigure name at D 3: 'JSOWD2'.
Number of included entities = 94.
Subfigure name at D 205: 'ARROW'.
Number of included entities = 1.
Subfigure name at D 227: 'MARKING'.
Number of included entities = 1.
Subfigure name at D 283: 'HW-36'.
Number of included entities = 2.

*** Entity type: 404

Drawing at D 297 contains 1 views.
Drawing at D 297 contains 0 annotation entities.

*** Entity type: 406

Independent property at D 787 applies to level 1. Independent property at
D 789 applies to level 2.

<<<< PART OF LOG FILE REMOVED HERE >>>>

*** Entity type: 408

Subfigure instance at D 1 references subfigure at D 3.
ERROR 2266: Subfigure definition (D 3) follows instance entity at D
1.
Subfigure instance at D 201 references subfigure at D 205.
ERROR 2266: Subfigure definition (D 205) follows instance entity at D
201.
Subfigure instance at D 211 references subfigure at D 205.
Subfigure instance at D 215 references subfigure at D 205.
Subfigure instance at D 219 references subfigure at D 205.
Subfigure instance at D 223 references subfigure at D 227.
ERROR 2266: Subfigure definition (D 227) follows instance entity at D
223.
Subfigure instance at D 231 references subfigure at D 227.
Subfigure instance at D 235 references subfigure at D 227.

<<<< PART OF LOG FILE REMOVED HERE >>>>

ERROR 2266: Subfigure definition (D 283) follows instance entity at D
279.
Subfigure instance at D 289 references subfigure at D 205.
Subfigure instance at D 293 references subfigure at D 205.

*** Entity type: 410

Scale of view at D 305 is 1.000000E+00.
Orthographic View entity at D 305 has 0 clipping planes specified.
XMIN = Not Set XMAX = Not Set
YMIN = Not Set YMAX = Not Set
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

2038: 45 Invalid Line font values.

*** Error Summary ***

0 fatal errors
0 severe errors
4 errors
45 warnings
0 cautions
0 nitpicks
1 notes

*** End of Analysis of d001q004.igs ***

10.4.2 Parser Log - IGESWorks

International TechneGroup Incorporated
Validation Logfile

Date: Tuesday August 16, 1994, 03:44 PM
Model: d001q004.igs

***** Validation Parameters *****

TOLERANCE CONFIGURATION VALUES

ZERO_TOL	= 1.000000e-13
MODEL_SPACE_PNT_COIN_TOL	= 1.000000e-03
EPSILON_TOL	= 1.000000e-08
PARM_SPACE_PNT_COIN_TOL	= 1.000000e-08
ISO_PARM_CURVE_TOL	= 1.000000e-08
NON_CONV_TOL	= 1.000000e-12
KNOT_COIN_TOL	= 1.000000e-10
SAME_INTER_TOL	= 1.000000e-12
PARALLEL_LINES_TOL	= 1.000000e-07
ANGLE_COIN_TOL	= 1.000000e-05
PNT_PROJ_TOL	= 1.000000e-07
COLIN_TOL	= 1.000000e-07
COPLANAR_TOL	= 1.000000e-08
ZERO_NORMAL_TOL	= 1.000000e-06
SAME_TANGENT_TOL	= 1.000000e-04
SAME_CURVATURE_TOL	= 1.000000e-04
SAME_DERIVATIVE_TOL	= 1.000000e-03
SINGULAR_TOL	= 1.000000e-10
MODEL_LINEAR_APPROX_TOL	= 1.000000e-03

***** Entity Listing Before Validation *****

Count	Type	Form	Description
119	100	0	Circular Arc
50	102	0	Composite Curve
8	106	11	Planar Piecewise Linear Curve
48	106	63	Simple Closed Planar Curve
477	110	0	Line
28	124	0	Transformation Matrix
114	212	0	General Note (Simple)
12	212	2	General Note (Font change)
46	230	0	Section Area (Standard Fill)
4	308	0	Subfigure Definition

1	404	0	Drawing (form 0)
8	406	3	Property (Level Function)
1	406	15	Property (Name)
1	406	16	Property (Drawing Size)
1	406	17	Property (Drawing Units)
21	408	0	Subfigure Instance
1	410	0	View

940 - Number of entities in selection list

***** Key to Validation Level Descriptions *****

Severity 4 - Explicit Error
Severity 3 - Implicit Error
Severity 2 - Explicit Warning
Severity 1 - Implicit Warning

***** Entity Validation *****

===== Entities Which Were Corrected =====

===== Entities Which Were Not Corrected =====

***** Entity Validation Summary:

Type	Form	Entity Count	Number Valid	Number of Warnings	Number of Errors	Number of Uncorrected Warnings	Number of Uncorrected Errors
Global Section		1	1	0	0	0	0
100	0	119	119	0	0	0	0
102	0	50	50	0	0	0	0
106	11	8	8	0	0	0	0
106	63	48	48	0	0	0	0
110	0	477	477	0	0	0	0
124	0	28	28	0	0	0	0
212	0	114	114	0	0	0	0
212	2	12	12	0	0	0	0
230	0	46	46	0	0	0	0
308	0	4	4	0	0	0	0
404	0	1	1	0	0	0	0
406	3	8	8	0	0	0	0
406	15	1	1	0	0	0	0
406	16	1	1	0	0	0	0
406	17	1	1	0	0	0	0
408	0	21	21	0	0	0	0
410	0	1	1	0	0	0	0
Totals:		941	941	0	0	0	0

10.4.3 Error Log Preview

ERROR REPORT FOR FILE d001q004.igs

>> File record length is 80
Terminate section report :

File Section	#lines
START	32
GLOBAL	5
DIRECTORY ENTRY	1880
PARAMETER DATA	2053
TERMINATE	1
TOTAL	3971

(Expect 80 X 3971 = 317680 bytes)

----- preliminary format scan complete -----

>> WARNING: Cannot use maximum power of 10 requested.
: Requested maximum power of 308 using 307.
: Field 11 line 3 of GLOBAL section. (Max. Exp. for Double)
1993),32,38,6,308,15,33H/usr2/cadds/parts/scr/4216074-c/3,1.0D0,1,2HIN, G 3
~~

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #71, DE entry #141 type SECTIONED AREA.
: Field 2, line 114 of PARAMETER DATA section.
230,143,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0; 141P 114106
~~

>> WARNING: Sectioned Area type 19 not supported
: Reading entity #75, DE entry #149 type SECTIONED AREA.
: Field 2, line 119 of PARAMETER DATA section.
230,151,19,0.0D0,0.0D0,0.0D0,0.0D0,0.0D0,0; 149P 119106
~~

<<<< PART OF LOG FILE REMOVED HERE >>>>

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 71 for graphic output.

>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 75 for graphic output.

AFCTN Test Report
94-114

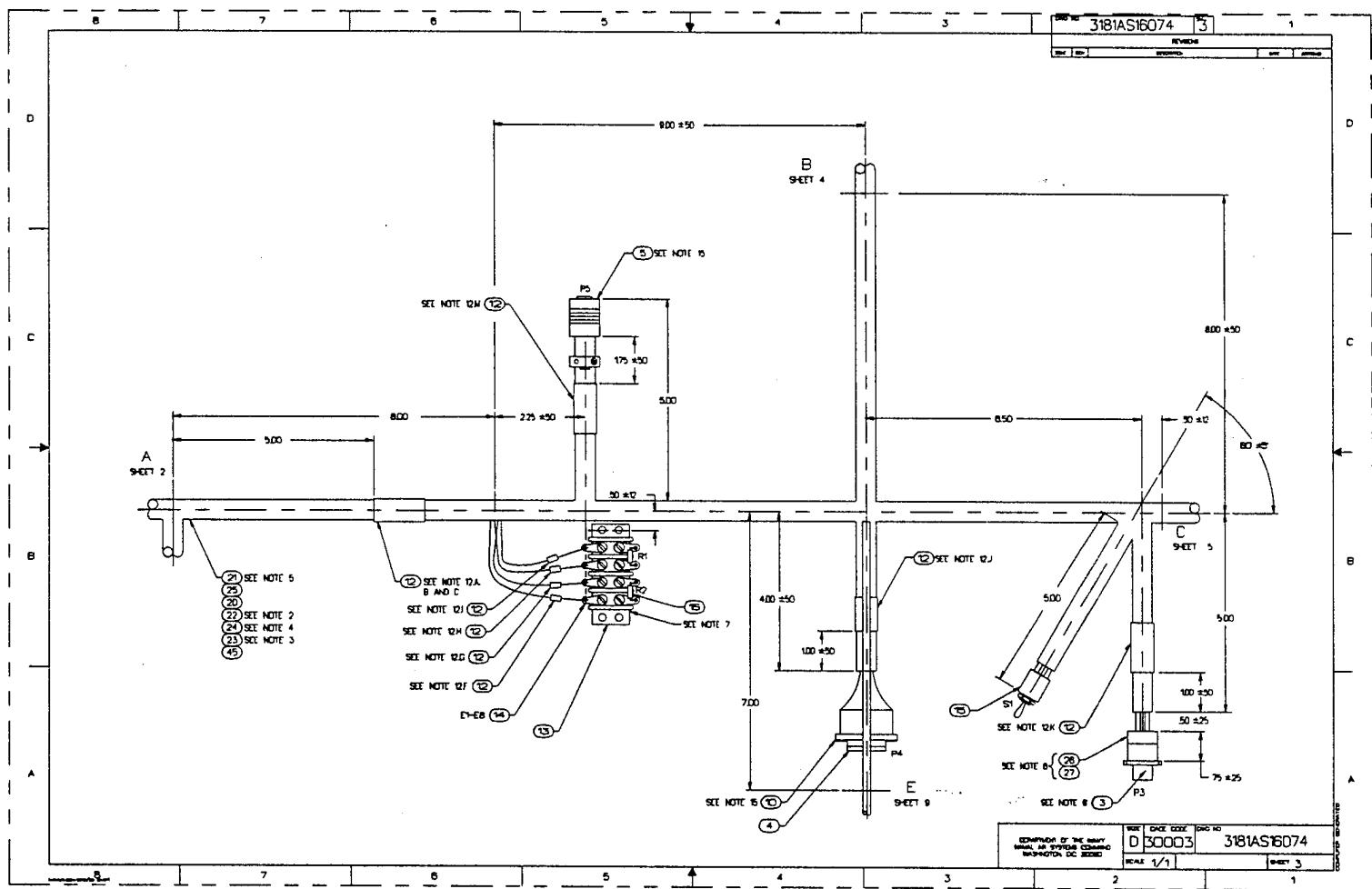
AFCTB Test Report
94-113

<<<< PART OF LOG FILE REMOVED HERE >>>>

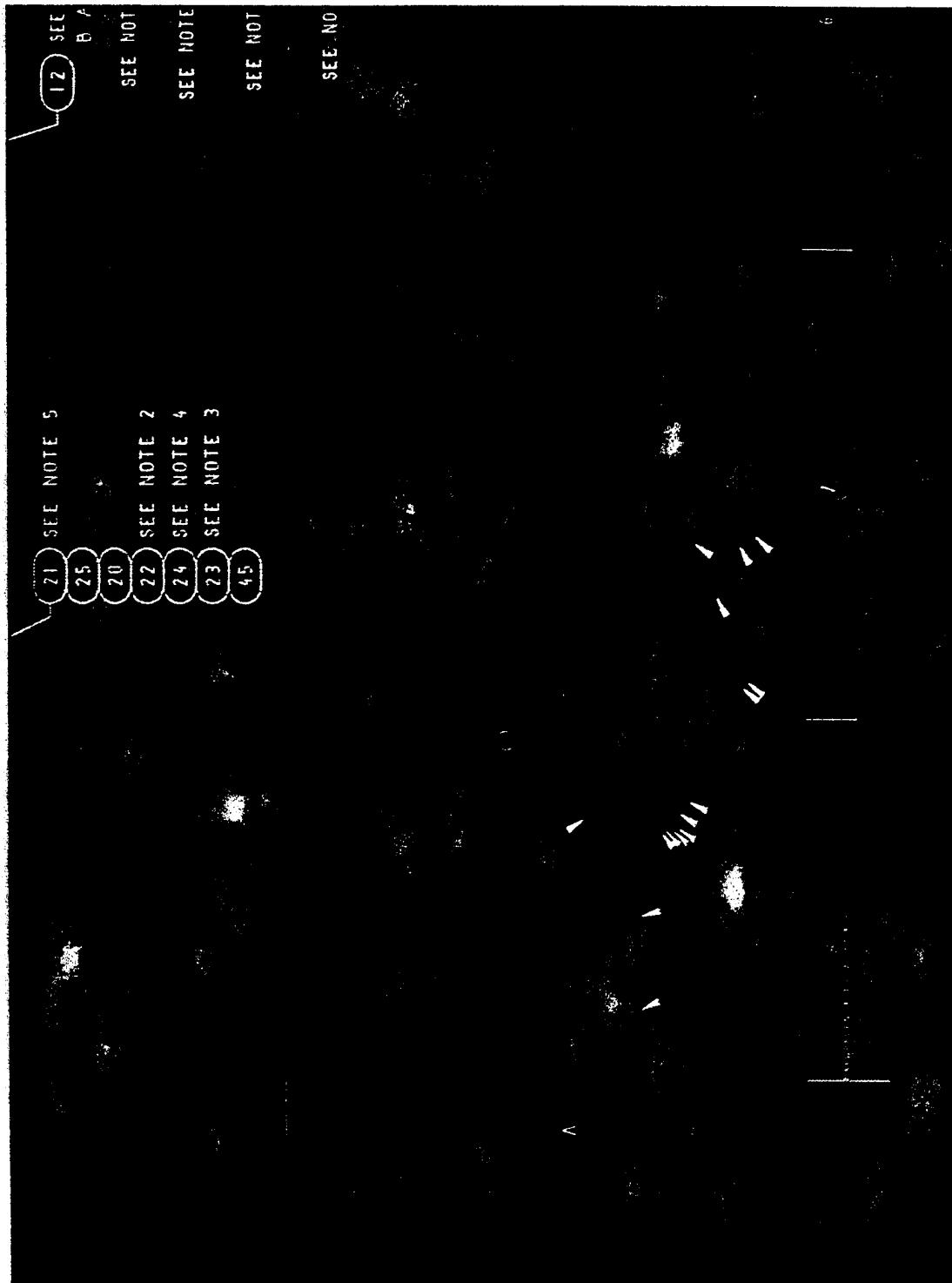
>> WARNING: Unsupported sectioned area type 19 modified to 16
: in entity 234 for graphic output.

Found 0 errors and 107 warnings

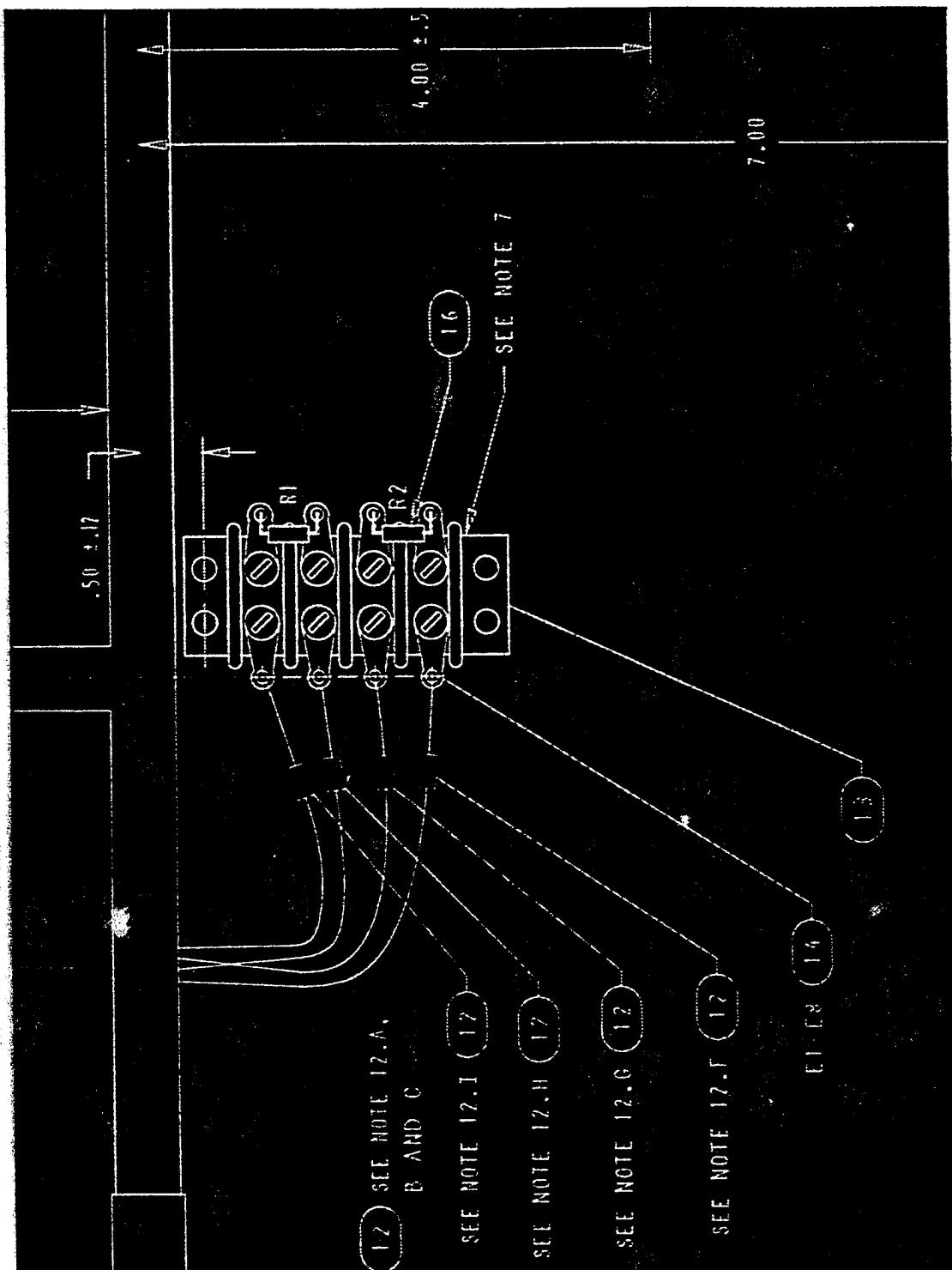
10.4.4 Output CALSView for Windows



10.4.5 Output IGESWorks - Detail Arrowheads



10.4.6 Output IGESWorks - Detail Missing Arrowheads



10.4.7 Output Preview

